


**KR S4 Catering Cleaner & Degreaser  
C888**

Date of compilation: 11/01/2024      Revised: 02/10/2024      Version: 2 (Replaced 1)

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

- 1.1 Product identifier:** KR S4 Catering Cleaner & Degreaser  
C888
- Other means of identification:**  
SCM001/02
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Multiuse cleaner. For professional users/industrial user only.  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
Arrow Solutions  
Rawdon Road, Moira,  
DE12 6DA, Swadlincote - Derbyshire - United Kingdom  
Phone: 01283 221044  
sales@arrowchem.com  
www.arrowchem.com
- 1.4 Emergency telephone number:** For 24/7 multilingual advice for spill, leak, fire, exposure, or accident Call CHEMTREC at +44 20 3885 0382 / +44 20 3807 3798 and provide CCN 1018674; NPIS: 0844 892 0111 (healthcare professionals only) or NHS 111.

**SECTION 2: HAZARDS IDENTIFICATION**

- 2.1 Classification of the substance or mixture:**  
**GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):**  
Classification of this product has been carried out in accordance with GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567).  
Eye Dam. 1: Serious eye damage, Category 1, H318  
Skin Irrit. 2: Skin irritation, Category 2, H315
- 2.2 Label elements:**  
**GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):**  
Danger
- 
- Hazard statements:**  
Eye Dam. 1: H318 - Causes serious eye damage.  
Skin Irrit. 2: H315 - Causes skin irritation.
- Precautionary statements:**  
P280: Wear protective gloves/eye protection/face protection.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310: Immediately call a POISON CENTER/doctor.  
P332+P313: If skin irritation occurs: Get medical advice/attention.  
P501: Dispose of the contents and/or its container in line with regulations on dangerous waste or packaging and waste packaging respectively.
- Substances that contribute to the classification**  
Alcohol ethoxylated (C9-C11) (6 EO) (CAS: 68439-46-3)
- 2.3 Other hazards:**  
Product does not meet PBT/vPvB criteria

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

- 3.1 Substance:**  
Non-applicable
- 3.2 Mixture:**

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)**

**Chemical description:** Tensoactive/s

**Components:**

In accordance with Annex II of The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020, the product contains:

| Identification  | Chemical name/Classification  | Concentration |
|-----------------|---|---------------|
| CAS: 68439-46-3 | <b>Alcohol ethoxylated (C9-C11) (6 EO)</b><br>Acute Tox. 4: H302; Eye Dam. 1: H318 - Danger   | 3 - <10 %     |
| CAS: 141-43-5   | <b>2-aminoethanol</b><br>Acute Tox. 4: H302+H312+H332; Aquatic Chronic 3: H412; Skin Corr. 1B: H314; STOT SE 3: H335 - Danger   | 1 - <3 %      |
| CAS: 97862-59-4 | <b>1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts</b><br>Aquatic Chronic 3: H412; Eye Dam. 1: H318 - Danger | 1 - <3 %      |

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

| Identification   | Acute toxicity  |                  | Genus  |
|--|-----------------|------------------|--------|
| 2-aminoethanol<br>CAS: 141-43-5                        | LD50 oral       | 1515 mg/kg       | Rat    |
|  | LD50 dermal     | 2504 mg/kg       | Rabbit |
|  | LC50 inhalation | Not relevant     |        |
| Alcohol ethoxylated (C9-C11) (6 EO)<br>CAS: 68439-46-3 | LD50 oral       | 500 mg/kg (ATEi) |        |
|  | LD50 dermal     | Not relevant     |        |
|  | LC50 inhalation | Not relevant     |        |

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

**By inhalation:**

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

**By skin contact:**

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

**By eye contact:**

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

**By ingestion/aspiration:**

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

**4.2 Most important symptoms and effects, both acute and delayed:**

Acute and delayed effects are indicated in sections 2 and 11.

**4.3 Indication of any immediate medical attention and special treatment needed:**

Not relevant

**SECTION 5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media:**

Suitable extinguishing media:

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**SECTION 5: FIREFIGHTING MEASURES (continued)**

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

**Unsuitable extinguishing media:**

Non-applicable

**5.2 Special hazards arising from the substance or mixture:**

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...).

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures:**

**For non-emergency personnel:**

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

**For emergency responders:**

Wear protective equipment. Keep unprotected persons away. See section 8.

**6.2 Environmental precautions:**

It is recommended to avoid environmental spillage of both the product and its container.

**6.3 Methods and material for containment and cleaning up:**

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

See sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling:**

**A.- General precautions for safe use**

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

**B.- Technical recommendations for the prevention of fires and explosions**

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

**C.- Technical recommendations on general occupational hygiene**

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

**D.- Technical recommendations to prevent environmental risks**

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

**7.2 Conditions for safe storage, including any incompatibilities:**

**A.- Specific storage requirements**

Minimum Temp.: 4 °C

Maximum Temp.: 40 °C

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**SECTION 7: HANDLING AND STORAGE (continued)**

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

**7.3 Specific end use(s):**

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be assessed in the workplace:

EH40/2005 Workplace exposure limits, fourth edition, published 2020:

| Identification                                 | Occupational exposure limits |       |                       |
|--|------------------------------|-------|-----------------------|
| 2-aminoethanol <sup>(1)</sup><br>CAS: 141-43-5 | WEL (8h)                     | 1 ppm | 2.5 mg/m <sup>3</sup> |
|  | WEL (15 min)                 | 3 ppm | 7.6 mg/m <sup>3</sup> |

<sup>(1)</sup> Skin

**DNEL (Workers):**

| Identification   |            | Short exposure |              | Long exposure        |                        |
|--|------------|----------------|--------------|----------------------|------------------------|
|  |            | Systemic       | Local        | Systemic             | Local                  |
| 2-aminoethanol<br>CAS: 141-43-5<br>EC: 205-483-3   | Oral       | Not relevant   | Not relevant | Not relevant         | Not relevant           |
|  | Dermal     | Not relevant   | Not relevant | 3 mg/kg              | Not relevant           |
|  | Inhalation | Not relevant   | Not relevant | 1 mg/m <sup>3</sup>  | 0.51 mg/m <sup>3</sup> |
| 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts<br>CAS: 97862-59-4<br>EC: 931-296-8 | Oral       | Not relevant   | Not relevant | Not relevant         | Not relevant           |
|  | Dermal     | Not relevant   | Not relevant | 12.5 mg/kg           | Not relevant           |
|  | Inhalation | Not relevant   | Not relevant | 44 mg/m <sup>3</sup> | Not relevant           |

**DNEL (General population):**

| Identification   |            | Short exposure |              | Long exposure           |                        |
|--|------------|----------------|--------------|-------------------------|------------------------|
|  |            | Systemic       | Local        | Systemic                | Local                  |
| 2-aminoethanol<br>CAS: 141-43-5<br>EC: 205-483-3   | Oral       | Not relevant   | Not relevant | 1.5 mg/kg               | Not relevant           |
|  | Dermal     | Not relevant   | Not relevant | 1.5 mg/kg               | Not relevant           |
|  | Inhalation | Not relevant   | Not relevant | 0.18 mg/m <sup>3</sup>  | 0.28 mg/m <sup>3</sup> |
| 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts<br>CAS: 97862-59-4<br>EC: 931-296-8 | Oral       | Not relevant   | Not relevant | 7.5 mg/kg               | Not relevant           |
|  | Dermal     | Not relevant   | Not relevant | 7.5 mg/kg               | Not relevant           |
|  | Inhalation | Not relevant   | Not relevant | 13.04 mg/m <sup>3</sup> | Not relevant           |

**PNEC:**

| Identification   |              |              |                         |             |
|--|--------------|--------------|-------------------------|-------------|
| 2-aminoethanol<br>CAS: 141-43-5<br>EC: 205-483-3   | STP          | 100 mg/L     | Fresh water             | 0.07 mg/L   |
|  | Soil         | 1.29 mg/kg   | Marine water            | 0.007 mg/L  |
|  | Intermittent | 0.028 mg/L   | Sediment (Fresh water)  | 0.357 mg/kg |
|  | Oral         | Not relevant | Sediment (Marine water) | 0.036 mg/kg |
| 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts<br>CAS: 97862-59-4<br>EC: 931-296-8 | STP          | 3000 mg/L    | Fresh water             | 0.013 mg/L  |
|  | Soil         | 0.85 mg/kg   | Marine water            | 0.001 mg/L  |
|  | Intermittent | Not relevant | Sediment (Fresh water)  | 11.1 mg/kg  |
|  | Oral         | Not relevant | Sediment (Marine water) | 1.11 mg/kg  |

**8.2 Exposure controls:**

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<UKCA marking>> or <<CE marking>>. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

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## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

### B.- Respiratory protection


| Pictogram  | PPE   | Remarks  |
|--|---|--|
|  <p>Compulsory use of face mask</p> | Filter mask for particles (Filter type: FFP1) | Replace when an increase in resistance to breathing is observed. |

C.- Specific protection for the hands

| Pictogram  | PPE  | Remarks   |
|--|--|---|
|  <p>Mandatory hand protection</p> | <p>Protective gloves against minor risks (Material: Nitrile, Breakthrough time: &gt; 480 min, Thickness: 0.062 mm, Conditions of use: Splashing)</p> | <p>Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN ISO 21420:2020 and EN ISO 374-1:2016+A1:2018</p> |

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.



#### D.- Eye and face protection

| Pictogram  | PPE   | Remarks   |
|--|---|---|
|  <p>Mandatory face protection</p> | Panoramic glasses against splash/projections. | Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing. |

### E.- Body protection

| Pictogram | PPE                  | Remarks   |
|-----------|----------------------|---|
|           | Work clothing        | Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994. |
|           | Anti-slip work shoes | Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2022 y EN 13832-1:2007                                 |

F.- Additional emergency measures

| Emergency measure   | Standards   | Emergency measure  | Standards  |
|---|---|--|--|
|  <p>Emergency shower</p> | <p>ANSI Z358-1<br/>ISO 3864-1:2011, ISO 3864-4:2011</p> |  <p>Eyewash stations</p> | <p>DIN 12 899<br/>ISO 3864-1:2011, ISO 3864-4:2011</p> |

**Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties:

**Appearance:**

|                          |                |
|--------------------------|----------------|
| Physical state at 20 °C: | Liquid         |
| Appearance:              | Transparent    |
| Colour:                  | Yellow         |
| Odour:                   | Characteristic |

\*Not relevant due to the nature of the product, not providing information property of its hazards.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)**

|  |                               |
|--|-------------------------------|
| Odour threshold:                             | Not relevant *                |
| <b>Volatility:</b>                           |                               |
| Boiling point at atmospheric pressure:       | 101 °C                        |
| Vapour pressure at 20 °C:                    | 3.522328 Pa                   |
| Vapour pressure at 50 °C:                    | 12268.25 Pa (12.27 kPa)       |
| Evaporation rate at 20 °C:                   | Not relevant *                |
| <b>Product description:</b>                  |                               |
| Density at 20 °C:                            | 1004 - 1024 kg/m <sup>3</sup> |
| Relative density at 20 °C:                   | 1.01                          |
| Dynamic viscosity at 20 °C:                  | Not relevant *                |
| Kinematic viscosity at 20 °C:                | Not relevant *                |
| Kinematic viscosity at 40 °C:                | Not relevant *                |
| Concentration:                               | Not relevant *                |
| pH:  | 10.3 - 10.9 (at 100 %)        |
| Vapour density at 20 °C:                     | Not relevant *                |
| Partition coefficient n-octanol/water 20 °C: | Not relevant *                |
| Solubility in water at 20 °C:                | Not relevant *                |
| Solubility properties:                       | Highly soluble                |
| Decomposition temperature:                   | Not relevant *                |
| Melting point/freezing point:                | Not relevant *                |
| <b>Flammability:</b>                         |                               |
| Flash Point:                                 | Non Flammable (>60 °C)        |
| Flammability (solid, gas):                   | Not relevant *                |
| Autoignition temperature:                    | 1010 °C                       |
| Lower flammability limit:                    | Not relevant *                |
| Upper flammability limit:                    | Not relevant *                |
| <b>Particle characteristics:</b>             |                               |
| Median equivalent diameter:                  | Non-applicable                |

**9.2 Other information:**

**Information with regard to physical hazard classes:**

|  |                |
|--|----------------|
| Explosive properties:  | Not relevant * |
| Oxidising properties:  | Not relevant * |
| Corrosive to metals:   | Not relevant * |
| Heat of combustion:  | Not relevant * |
| Aerosols-total percentage (by mass) of flammable components: | Not relevant * |

**Other safety characteristics:**

|                           |                |
|---------------------------|----------------|
| Surface tension at 20 °C: | Not relevant * |
| Refraction index:         | Not relevant * |

\*Not relevant due to the nature of the product, not providing information property of its hazards.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.

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**SECTION 10: STABILITY AND REACTIVITY (continued)**

**10.2 Chemical stability:**

Chemically stable under the indicated conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

| Shock and friction | Contact with air | Increase in temperature | Sunlight       | Humidity       |
|--------------------|------------------|-------------------------|----------------|----------------|
| Not applicable     | Not applicable   | Not applicable          | Not applicable | Not applicable |

**10.5 Incompatible materials:**

| Acids              | Water          | Oxidising materials | Combustible materials | Others                        |
|--------------------|----------------|---------------------|-----------------------|-------------------------------|
| Avoid strong acids | Not applicable | Precaution          | Not applicable        | Avoid alkalis or strong bases |

**10.6 Hazardous decomposition products:**

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO<sub>2</sub>), carbon monoxide and other organic compounds.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects:**

The experimental information related to the toxicological properties of the product itself is not available

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity: Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Produces skin inflammation.
- Contact with the eyes: Produces serious eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

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**SECTION 11: TOXICOLOGICAL INFORMATION (continued)**

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

**Other information:**

Not relevant

**Specific toxicology information on the substances:**

| Identification  | Acute toxicity  |                  | Genus  |
|---|-----------------|------------------|--------|
| Alcohol ethoxylated (C9-C11) (6 EO)<br>CAS: 68439-46-3  | LD50 oral       | 500 mg/kg (ATEi) |        |
|   | LD50 dermal     | >5000 mg/kg      |        |
|   | LC50 inhalation | >20 mg/L         |        |
| 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts<br>CAS: 97862-59-4 | LD50 oral       | 2335 mg/kg       | Rat    |
|   | LD50 dermal     | >5000 mg/kg      |        |
|   | LC50 inhalation | >5 mg/L          |        |
| 2-aminoethanol<br>CAS: 141-43-5   | LD50 oral       | 1515 mg/kg       | Rat    |
|   | LD50 dermal     | 2504 mg/kg       | Rabbit |
|   | LC50 inhalation | 11 mg/L (4 h)    | Rat    |

**SECTION 12: ECOLOGICAL INFORMATION**

The experimental information related to the eco-toxicological properties of the product itself is not available

Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

**12.1 Toxicity:**

**Acute toxicity:**

| Identification   | Concentration |                  | Species                 | Genus      |
|--|---------------|------------------|-------------------------|------------|
| Alcohol ethoxylated (C9-C11) (6 EO)<br>CAS: 68439-46-3   | LC50          | 6 mg/L (96 h)    | N/A                     | Fish       |
|  | EC50          | 5.3 mg/L (48 h)  | N/A                     | Crustacean |
|  | EC50          | Not relevant     |                         |            |
| 2-aminoethanol<br>CAS: 141-43-5  | LC50          | 349 mg/L (96 h)  | Cyprinus carpio         | Fish       |
|  | EC50          | 65 mg/L (48 h)   | Daphnia magna           | Crustacean |
|  | EC50          | 22 mg/L (72 h)   | Scenedesmus subspicatus | Algae      |
| 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18 (even numbered) acyl derivs., hydroxides, inner salts<br>CAS: 97862-59-4 | LC50          | 1.9 mg/L (96 h)  | N/A                     | Fish       |
|  | EC50          | 6.5 mg/L (48 h)  | Daphnia magna           | Crustacean |
|  | EC50          | 4.66 mg/L (72 h) | Desmodesmus subspicatus | Algae      |

**Chronic toxicity:**

| Identification   | Concentration |            | Species             | Genus      |
|--|---------------|------------|---------------------|------------|
| 2-aminoethanol<br>CAS: 141-43-5  | NOEC          | 1.24 mg/L  | Oryzias latipes     | Fish       |
|  | NOEC          | 0.85 mg/L  | Daphnia magna       | Crustacean |
| 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18 (even numbered) acyl derivs., hydroxides, inner salts<br>CAS: 97862-59-4 | NOEC          | 0.135 mg/L | Oncorhynchus mykiss | Fish       |
|  | NOEC          | 0.32 mg/L  | Daphnia magna       | Crustacean |

**12.2 Persistence and degradability:**

**Substance-specific information:**

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**SECTION 12: ECOLOGICAL INFORMATION (continued)**

| Identification  | Degradability |              | Biodegradability |              |
|---|---------------|--------------|------------------|--------------|
| Alcohol ethoxylated (C9-C11) (6 EO)<br>CAS: 68439-46-3  | BOD5          | Not relevant | Concentration    | Not relevant |
|   | COD           | Not relevant | Period           | 28 days      |
|   | BOD5/COD      | Not relevant | % Biodegradable  | 60 %         |
| 2-aminoethanol<br>CAS: 141-43-5   | BOD5          | Not relevant | Concentration    | 20 mg/L      |
|   | COD           | Not relevant | Period           | 21 days      |
|   | BOD5/COD      | Not relevant | % Biodegradable  | 90 %         |
| 1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-C8-18(even numbered) acyl derivs., hydroxides, inner salts<br>CAS: 97862-59-4 | BOD5          | Not relevant | Concentration    | 10 mg/L      |
|   | COD           | Not relevant | Period           | 28 days      |
|   | BOD5/COD      | Not relevant | % Biodegradable  | 87 %         |

**12.3 Bioaccumulative potential:**

**Substance-specific information:**

| Identification                  | Bioaccumulation potential |       |
|---------------------------------|---------------------------|-------|
| 2-aminoethanol<br>CAS: 141-43-5 | BCF                       | 3     |
|                                 | Pow Log                   | -1.31 |
|                                 | Potential                 | Low   |

**12.4 Mobility in soil:**

| Identification                  | Absorption/desorption |                      | Volatility |                               |
|---------------------------------|-----------------------|----------------------|------------|-------------------------------|
| 2-aminoethanol<br>CAS: 141-43-5 | Koc                   | 0.27                 | Henry      | 3.7E-5 Pa·m <sup>3</sup> /mol |
|                                 | Conclusion            | Very High            | Dry soil   | No                            |
|                                 | Surface tension       | 5.025E-2 N/m (25 °C) | Moist soil | No                            |

**12.5 Results of PBT and vPvB assessment:**

Product does not meet PBT/vPvB criteria

**12.6 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods:**

| Code      | Description                                | Waste class |
|-----------|--|-------------|
| 20 01 29* | detergents containing hazardous substances | Hazardous   |

**Type of waste:**

HP4 Irritant — skin irritation and eye damage

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance The Waste (England & Wales) Regulations 2011, 2011 No. 988. As under 15 01 of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-hazardous residue. Waste should not be disposed of to drains. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of UK REACH the provisions related to waste management are stated:

UK legislation: The Waste (England & Wales) Regulations 2011.

**SECTION 14: TRANSPORT INFORMATION**

This product is not regulated for transport (ADR/RID,IMDG,IATA)

**SECTION 15: REGULATORY INFORMATION**

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**SECTION 15: REGULATORY INFORMATION (continued)**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

- Substances listed in UK candidate list of substances of very high concern (SVHCs): Not relevant
- Substances listed in UK REACH Authorisation List (Annex 14): Not relevant

**The Detergents (Amendment) (EU Exit) Regulations:**

In accordance with this regulation the product complies with the following:

The tensoactives contained in this mixture comply with the biodegradability criteria stipulated in The Detergents (Amendment) (EU Exit) Regulations. The information to prove this is available to the relevant authorities of the Member States and will be shown to them by direct request or the request of a detergent manufacturer.

Labelling for contents:

| Component              | Concentration interval |
|------------------------|------------------------|
| Non-ionic surfactants  | 5 ≤ % (w/w) < 15       |
| Amphoteric surfactants | % (w/w) < 5            |

**Restrictions to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII UK REACH, etc ....):**

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020.

Control of Substances Hazardous to Health Regulations 2002 (as amended)

EH40/2005 Workplace exposure limits.

COSHH-SR24 Storing chemical products (small scale).

COSHH-SR2 Diluting chemical concentrates.

COSHH-SR4 Manual cleaning and disinfecting surfaces.

The Product Safety and Metrology etc. (Amendment etc.) (EU Exit) Regulations 2019: SCHEDULE 34 - Amendment of Regulation (EC) No 1223/2009 and related amendments.

The Detergents (Amendment) (EU Exit) Regulations 2020.

**SECTION 16: OTHER INFORMATION**

**Legislation related to safety data sheets:**

This safety data sheet has been designed in accordance with ANNEX II-The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

**Texts of the legislative phrases mentioned in section 2:**

H318: Causes serious eye damage.

H315: Causes skin irritation.

**Texts of the legislative phrases mentioned in section 3:**

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

**GB CLP Regulation (UK S.I. 2019/720 and UK S.I. 2020/1567):**

Acute Tox. 4: H302 - Harmful if swallowed.

Acute Tox. 4: H302+H312+H332 - Harmful if swallowed, in contact with skin or if inhaled.

Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects.

Eye Dam. 1: H318 - Causes serious eye damage.

Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.

STOT SE 3: H335 - May cause respiratory irritation.

**Classification procedure:**

Eye Dam. 1: Calculation method

Skin Irrit. 2: Calculation method

**Advice related to training:**

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

**Principal bibliographical sources:**

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**SECTION 16: OTHER INFORMATION (continued)**

<http://echa.europa.eu>  
<http://eur-lex.europa.eu>

**Abbreviations and acronyms:**

ADR: European agreement concerning the international carriage of dangerous goods by road  
IMDG: International maritime dangerous goods code  
IATA: International Air Transport Association  
ICAO: International Civil Aviation Organisation  
COD: Chemical Oxygen Demand  
BOD5: 5day biochemical oxygen demand  
BCF: Bioconcentration factor  
LD50: Lethal Dose 50  
LC50: Lethal Concentration 50  
EC50: Effective concentration 50  
LogPOW: Octanolwater partition coefficient  
Koc: Partition coefficient of organic carbon  
UFI: unique formula identifier  
IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at UK, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -